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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,978	10/29/2003	Edmund O. Schweitzer III		8010

7590 10/06/2005  
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EXAMINER

THOMAS, LUCY M

ART UNIT	PAPER NUMBER
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2836

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/695,978	<b>Applicant(s)</b> SCHWEITZER ET AL.	
	<b>Examiner</b> Lucy Thomas	<b>Art Unit</b> 2836	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 3, 4, 5 and 7 are objected to because of the following informalities:

Recitation of "in" in Claim 3, line 2 should be corrected to "is." Claim 4 is indefinite as it is unclear what is recited total refers to. Also it is not clear if the "or" on line 2 of Claim 2 should be "of." Recitation of "5%" in Claim 4, line 2 should be made clear to identify 5% of which of the said elements. There is no apparent distinction between Claim 3 and Claim 4; therefore, one of the Claims should be cancelled.

Claim 5 recites the limitation "selected 5 percentage" in line 1-2. There is insufficient antecedent basis for this limitation in the claim. Claim 7 recites "threshold value" in line 1. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-2, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Guzman-Casillas et al. (US 6,028,754). Regarding Claim 1, Guzman-Casillas et al. discloses a system (Figures 6 and 9) for improving the performance of a distance type protective relay for power systems, wherein, the relay includes a calculation circuit responsive to voltage and current values from the power line to produce a quantity (m value) analogous to the distance between the relay and a fault on the power line,

Art Unit: 2836

wherein the quantity is applied to a distance element for comparison of said quantity with a setting reach value for a selected zone of a protection (Column 2, lines 17-35, Column 8, lines 15-36), the system comprising: a filter circuit responsive to said quantity for filtering said quantity before the quantity is applied to the distance element, resulting in the smoothing of the quantity (Column 8, lines 4-14); and a control circuit for controlling the application of the filtered quantity to the distance element such that the filtered quantity is applied only when said quantity is above a preselected first threshold value (Column 9, lines 61-67, Column 10, lines 1-9).

Regarding Claim 2, Guzman-Casillas et al. discloses the said system, wherein the preselected first threshold is a selected percentage of the setting reach value (Column 10, lines 10-15).

Regarding Claim 6, Guzman-Casillas et al. discloses a system wherein, said quantity is a high value, significantly higher than said setting reach value, when there is no fault on the power line, and wherein the system includes a circuit for precharging the filter to a second selected value when said quantity decreases to a selected threshold value from said high value, in response to fault (Figure 9, Column 10, lines 60-63, Column 11, lines 1-9).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3, 4, 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guzman-Casillas et al. (US 6,028,754). Regarding Claim 3 and 4, the recited limitations are not considered inventive because the threshold is typically set based on the tolerance for error, which would result in 100% minus the error plus a safety margin as recited by the Claim. The claims specify a safety margin of 5% and Claim 5 further specifies an error of 8%. However, it has been decided that where the prior art disclose the general condition of a claim, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 220 F.2d 454, 456 105 USPQ 233, 235 (CCPA 1955).

Regarding Claim 7, the reference does not disclose a specific value for the threshold. However, it would have been obvious that the threshold value may be set approximately four times the setting reach value as recited in Claim 7. It has been decided that where the prior art disclose the general condition of a claim, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 220 F.2d 454, 456 105 USPQ 233, 235 (CCPA 1955).

### **Conclusion**

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 5,703,745, US 5,349,490, US 5,325,061, US 4,821,137.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lucy Thomas whose telephone number is 571-272-6002. The examiner can normally be reached on Monday - Friday 8:00 AM - 4:30 PM EST.

Art Unit: 2836

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 571-272-2058. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LT  
September 30, 2005

  
Phuong T. Vu  
Primary Examiner